PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: MICHAEL J. JOSLYN

FILED:

APRIL 20, 2004

For:

PLANARIZING MACHINES AND
METHODS FOR DISPENSING
PLANARIZING SOLUTIONS IN THE
PROCESSING OF MICROELECTRONIC

WORKPIECES

<u>Information Disclosure Statement Within Three Months of</u>
Application Filing or Before First Action – 37 C.F.R. § 1.97(b)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

~ Sir:

1. Timing of Submission

This information disclosure is being filed within three months of the filing date of this application or date of entry into the national stage of an international application or before the mailing date of a first Office action on the merits, whichever occurs last [37 C.F.R. § 1.97(b)]. The references listed on the enclosed Form PTO-1449 (modified) may be material to the examination of this application; the Examiner is requested to make them of record in the application.

2. Cited Information

| \boxtimes | Copies of the following references can be found in parent U.S. A | Application |
|-------------|--|-------------|
| | No. 09/939,430; | |

⋈ All cited references

☐ The following:

3. Effect of Information Disclosure Statement (37 C.F.R. § 1.97(h))

This Information Disclosure Statement is not to be construed as a representation that: (i) a search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the cited information is, or is considered to be, material to patentability. In addition,

applicant does not admit that any enclosed item of information constitutes prior art to the subject invention and specifically reserves the right to demonstrate that any such reference is not prior art.

4. Fee Payment

No fees are believed due because this Information Disclosure Statement is being filed before the mailing date of the first Office Action.

However, should the Commissioner determine that fees are due in order for this Information Disclosure Statement to be considered, the Commissioner is hereby authorized to charge such fees to Deposit Account No. 50-0665.

Respectfully submitted, Perkins Coie LLP

Date: April 20, 2004

Paul T. Parker

Registration No. 38,264

**. *...

Correspondence Address:

Customer No. 25096
Perkins Coie LLP
P.O. Box 1247
Seattle, Washington 98111-1247
(206) 359-8000

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Form PTO-1449 (Modified) (Use several sheets if necessary)

of

1

Sheet

| COMPLETE IF KNOWN | | | | |
|----------------------|-------------------|--|--|--|
| Application Number | | | | |
| Confirmation Number | | | | |
| Filing Date | April 20, 2004 | | | |
| First Named Inventor | Michael J. Joslyn | | | |
| Group Art Unit | | | | |
| Examiner Name | | | | |
| Attorney Docket No. | 108298539US2 | | | |

| U.S. PATENT DOCUMENTS | | | | | |
|-----------------------|-------------|--|--|--|---|
| Examiner Initials* | Cite No. | U.S. Patent or Application Kind Code NUMBER (if known) | Name of Patentee or Inventor of Cited Document | Date of Publication or Filing Date of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | Re. 34,425 | Schultz | 11/02/1993 | - |
| | | 5,069,002 | Sandhu et al. | 12/03/1991 | |
| | | 5,081,796 | Schultz | 01/21/1992 | |
| | | 5,209,816 | Yu et al. | 05/11/1993 | |
| | | 5,225,034 | Yu et al. | 07/06/1993 | |
| | | 5,232,875 | Tuttle et al. | 08/03/1993 | |
| | | 5,234,867 | Schultz et al. | 08/10/1993 | |
| | | 5,240,552 | Yu et al. | -08/31/1993 | |
| | | 5,244,534 | Yu et al. | 09/14/1993 | |
| | | 5,245,790 | Jerbic | 09/21/1993 | |
| | | 5,245,796 | Miller et al. | 09/21/1993 | |
| | | 5,354,490 | Yu et al. | 10/11/1994 | |
| | | 5,421,769 | Schultz et al. | 06/06/1995 | |
| | | 5,433,651 | Lustig et al. | 07/18/1995 | |
| | | 5,449,314 | Meikle et al. | 09/12/1995 | |
| | | 5,486,129 | Sandhu et al. | 01/23/1996 | |
| | | 5,514,245 | Doan et al. | 05/07/1996 | |
| | | 5,533,924 | Stroupe et al. | 07/09/1996 | |
| | | 5,540,810 | Sandhu et al. | 07/30/1996 | |
| | | 5,616,069 | Walker et al. | 04/01/1997 | |
| | | 5,618,381 | Doan et al. | 04/08/1997 | |
| | | 5,643,060 | Sandhu et al. | 07/01/1997 | |
| | | 5,645,682 | Skrovan | 07/08/1997 | |

EXAMINER DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application(s).

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Form PTO-1449 (Modified) (Use several sheets if necessary)

of

2

| COMPLETE IF KNOWN | | | | | | |
|----------------------|--------------------|--|--|--|--|--|
| Application Number | Application Number | | | | | |
| Confirmation Number | | | | | | |
| Filing Date | . April 20, 2004 | | | | | |
| First Named Inventor | Michael J. Joslyn | | | | | |
| Group Art Unit | | | | | | |
| Examiner Name | | | | | | |
| Attorney Docket No. | 108298539US2 | | | | | |

| U.S. PATENT DOCUMENTS | | | | | |
|-----------------------|-------------|--|--|--|---|
| Examiner Initials* | Cite No. | U.S. Patent or Application Kind Code NUMBER (if known) | Name of Patentee or Inventor of Cited Document | Date of Publication or Filing Date of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | 5,655,951 | Meikle et al. | 08/12/1997 | |
| | | 5,658,183 | Sandhu et al. | 08/19/1997 | |
| | | 5,658,190 | Wright et al. | 08/19/1997 | |
| | | 5,664,988 | Stroupe et al. | 09/09/1997 | |
| | | 5,679,065 | Henderson | 10/21/1997 | |
| | | 5,702,292 | Brunelli et al. | 12/30/1997 | |
| | | 5,725,417 | Robinson | 03/10/1998 | |
| | | 5,730,642 | Sandhu et al. | 03/24/1998 | |
| | | 5,747,386 | Moore | 05/05/1998 | |
| | | 5,779,522 | Walker et al. | 07/14/1998 | |
| | | 5,782,675 | Southwick | 07/21/1998 | |
| | | 5,792,709 | Robinson et al. | 08/11/1998 | |
| | | 5,795,495 | Meikle | 08/18/1998 | |
| | | 5,801,066 | Meikle | 09/01/1998 | |
| | | 5,807,165 | Uzoh et al. | 09/15/1998 | 1.01 |
| | | 5,827,781 | Skrovan et al. | 10/27/1998 | |
| | | 5,830,806 | Hudson et al. | 11/03/1998 | |
| | | 5,833,519 | Moore | 11/10/1998 | |
| | | 5,846,336 | Skrovan | 12/08/1998 | |
| | | 5,851,135 | Sandhu et al. | 12/22/1998 | |
| | | 5,868,896 | Robinson et al. | 02/09/1999 | |
| | | 5,879,226 | Robinson | 03/09/1999 | |
| | | 5,882,248 | Wright et al. | 03/16/1999 | |

| EXAMINER | | DATE CONSIDERED | |
|------------|---|--|-----|
| | | | |
| | | · · · | |
| *EXAMINER: | | formance with MPEP 609. Draw line through citation if not in conformance and | ₫ |
| | not considered. Include copy of this form with next communication | cation to application(s). | - 1 |

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Form PTO-1449 (Modified) (Use several sheets if necessary)

of

3

| COMPLETE IF KNOWN | | | | | |
|----------------------|-------------------|--|--|--|--|
| Application Number | | | | | |
| Confirmation Number | | | | | |
| Filing Date | April 20, 2004 | | | | |
| First Named Inventor | Michael J. Joslyn | | | | |
| Group Art Unit | | | | | |
| Examiner Name | | | | | |
| Attorney Docket No. | 108298539US2 | | | | |

| U.S. PATENT DOCUMENTS | | | | | |
|-----------------------|-------------|--|-----------------|--|---|
| Examiner Initials* | Cite No. | U.S. Patent or Application Kind Coo NUMBER (if known | | Date of Publication or Filing Date of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | 5,893,754 | Robinson et al. | 04/13/1999 | |
| | | 5,895,550 | Andeas | 04/20/1999 | |
| | | 5,910,043 | Manzonie et al. | 06/08/1999 | |
| | | 5,916,819 | Skrovan et al. | 06/29/1999 | |
| | | 5,930,699 | Bhatia | 07/27/1999 | |
| | | 5,934,980 | Koos et al. | 08/10/1999 | |
| | | 5,945,347 | Wright | 08/31/1999 | |
| | | 5,954,912 | Moore | 09/21/1999 | |
| | | 5,967,030 | Blalock | 10/19/1999 | |
| | | 5,972,792 | Hudson | 10/26/1999 | |
| | | 5,975,994 | Sandhu et al. | 11/2/1999 | |
| | | 5,980,363 | Meikle et al. | 11/09/1999 | |
| | | 5,981,396 | Robinson et al. | 11/09/1999 | |
| | | 5,990,012 | Robinson et al. | 11/23/1999 | |
| | | 5,994,224 | Sandhu et al. | 11/30/1999 | |
| | | 5,997,384 | Blalock | 12/07/1999 | |
| | | 6,004,196 | Doan et al. | 12/21/1999 | |
| | | 6,039,633 | Chopra | 03/21/2000 | |
| | | 6,040,245 | Sandhu et al. | 03/21/2000 | |
| | | 6,054,015 | Brunelli et al. | 04/25/2000 | |
| | | 6,060,395 | Skrovan et al. | 05/09/2000 | |
| | | 6,066,030 | Uzoh | 05/23/2000 | |
| | | 6,074,286 | Ball | 06/13/2000 | |

| EXAMINER | | DATE CONSIDERED |
|------------|--|---|
| | | |
| | | |
| *EXAMINER: | Initial if reference considered, whether or not criteria is in confe | ormance with MPEP 609. Draw line through citation if not in conformance and |
| | not considered. Include copy of this form with next communic | ation to application(s). |

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Form PTO-1449 (Modified) (Use several sheets if necessary)

of

4

| COMPLETE IF KNOWN | | | | | | |
|----------------------|--------------------|--|--|--|--|--|
| Application Number | Application Number | | | | | |
| Confirmation Number | | | | | | |
| Filing Date | April 20, 2004 | | | | | |
| First Named Inventor | Michael J. Joslyn | | | | | |
| Group Art Unit | | | | | | |
| Examiner Name | | | | | | |
| Attorney Docket No. | 108298539US2 | | | | | |

| U.S. PATENT DOCUMENTS | | | | | | |
|-----------------------|---|--|----|--|--|---|
| Examiner Initials* | | U.S. Patent or Application Kind Code NUMBER (if known) | | Name of Patentee or Inventor of Cited Document | Date of Publication or Filing Date of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | 6,077,785 | | Andreas | 06/20/2000 | |
| | | 6,083,085 | | Lankford | 07/04/2000 | |
| | | 6,110,820 | | Sandhu et al. | 08/29/2000 | |
| | | 6,116,988 | | Ball | 09/12/2000 | |
| | | 6,120,354 | | Koos et al. | 09/19/2000 | |
| | | 6,124,207 | | Robinson et al. | 09/26/2000 | |
| | | 6,135,856 | | Tjaden et al. | 10/24/2000 | |
| | | 6,136,218 | | Skrovan et al. | 10/24/2000 | |
| | | 6,139,402 | | Moore | 10/31/2000 | |
| | | 6,143,123 | | Robinson et al. | 11/07/2000 | - |
| | | 6,143,155 | | Adams et al. | 11/07/2000 | - |
| | | 6,139,402 | | Moore | 10/31/2000 | |
| | | 6,143,123 | | Robinson et al. | 11/07/2000 | |
| | - | 6,143,155 | | Adams et al. | 11/07/2000 | |
| | | 6,152,808 | | Moore | 11/28/2000 | |
| | | 6,176,763 | B1 | Kramer et al. | 01/23/2001 | |
| | | 6,176,992 | B1 | Talieh | 01/23/2001 | |
| | | 6,180,525 | B1 | Morgan | 01/30/2001 | |
| | | 6,187,681 | B1 | Moore | 02/13/2001 | |
| | | 6,191,037 | B1 | Robinson et al. | 02/20/2001 | |
| | | 6,193,588 | B1 | Carlson et al. | 02/27/2001 | |
| | | 6,196,899 | B1 | Chopra et al. | 03/6/2001 | |
| | | 6,200,901 | B1 | Hudson et al. | 03/13/2001 | |

| EXAMINER | | DATE CONSIDERED |
|------------|--|---|
| | | |
| | | · |
| *EXAMINER: | Initial if reference considered, whether or not criteria is in confe | ormance with MPEP 609. Draw line through citation if not in conformance and |
| | not considered. Include copy of this form with next communic | ation to application(s). |

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Form PTO-1449 (Modified) (Use several sheets if necessary)

of

5

| COMPLETE IF KNOWN | | | | |
|----------------------|-------------------|--|--|--|
| Application Number | | | | |
| Confirmation Number | | | | |
| Filing Date | April 20, 2004 | | | |
| First Named Inventor | Michael J. Joslyn | | | |
| Group Art Unit | - | | | |
| Examiner Name | S. S. L. | | | |
| Attorney Docket No. | 108298539US2 | | | |

| U.S. PATENT DOCUMENTS | | | | | | |
|-----------------------|-------------|--|----|--|--|---|
| Examiner Initials* | Cite No. | U.S. Patent or Application Kind Code NUMBER (if known) | | Name of Patentee or Inventor of Cited Document | Date of Publication or Filing Date of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | 6,203,404 | B1 | Joslyn et al. | 03/20/2001 | - |
| | | 6,203,413 | B1 | Skrovan | 03/20/2001 | • |
| | | 6,206,756 | B1 | Chopra et al. | 03/27/2001 | |
| | _ | 6,206,757 | B1 | Custer et al. | 03/27/2001 | |
| | | 6,210,257 | B1 | Carlson | 04/03/2001 | |
| | | 6,213,845 | B1 | Elledge | 04/10/2001 | |
| | | 6,218,316 | B1 | Marsh | 04/17/2001 | |
| | | 6,220,934 | B1 | Sharples et al. | 04/24/2001 | - |
| | | 6,227,955 | B1 | Custer et al. | 05/08/2001 | |
| | | 6,234,874 | B1 | Ball | 05/22/2001 | |
| | | 6,234,877 | B1 | Koos et al. | 05/22/2001 | |
| | | 6,234,878 | B1 | Moore | 05/22/2001 | |
| 1111 1111 | | 6,237,483 | B1 | Blalock | 05/29/2001 | |
| | | 6,238,270 | B1 | Robinson | 05/29/2001 | |
| | | 6,250,994 | B1 | Chopra et al. | 06/26/2001 | |
| | | 6,251,785 | B1 | Wright | 06/26/2001 | |
| | | 6,261,151 | B1 | Sandhu et al. | 07/17/2001 | |
| | | 6,261,163 | B1 | Walker et al. | 07/17/2001 | |
| | | 6,267,650 | B1 | Hembree | 07/31/2001 | |
| | | 6,271,139 | B1 | Alwan et al. | 08/07/2001 | |
| | | 6,273,786 | B1 | Chopra et al. | 08/14/2001 | |
| | | 6,273,796 | B1 | Moore | 0/14/2001 | |
| | | 6,273,800 | B1 | Walker et al. | 08/14/2001 | |

| EXAMINER | | DATE CONSIDERED |
|------------|--|--|
| | | |
| +574441150 | | |
| *EXAMINER: | | formance with MPEP 609. Draw line through citation if not in conformance and |
| | not considered. Include copy of this form with next communic | ation to application(s). |

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Form PTO-1449 (Modified) (Use several sheets if necessary)

of

6

| COMPLETE IF KNOWN | | | | | |
|----------------------|-------------------|--|--|--|--|
| Application Number | | | | | |
| Confirmation Number | | | | | |
| Filing Date | April 20, 2004 | | | | |
| First Named Inventor | Michael J. Joslyn | | | | |
| Group Art Unit | | | | | |
| Examiner Name | | | | | |
| Attorney Docket No. | 108298539US2 | | | | |

| | U.S. PATENT DOCUMENTS | | | | | |
|-----------------------|-----------------------|-----------|------------------------|---|--|---|
| Examiner Initials* | Cite No. | | ind Code (if known) | Name of Patentee or Inventor of Cited Document | Date of Publication or Filing Date of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | 6,276,996 | B1 | Chopra | 08/21/2001 | |
| | | 6,284,660 | B1 | Doan | 09/04/2001 | |
| | | 6,306,008 | B1 | Moore | 10/23/2001 | |
| | | 6,306,012 | B1 | Sabde | 10/23/2001 | |
| | | 6,306,014 | B1 | Walker et al. | 10/23/2001 | |
| | | 6,306,768 | B1 | Klein | 10/23/2001 | <u>.</u> . |
| | | 6,312,486 | B1 | Sandhu et al. | 11/06/2001 | |
| | | 6,312,558 | B2 | Moore | 11/06/2001 | |
| | | 6,313,038 | B1 | Chopra et al. | 11/06/2001 | |
| | | 6,328,632 | B1 | Chopra | 12/11/2001 | |
| | _ | 6,331,139 | B2 | Walker et al. | 12/18/2001 | |
| | | 6,331,488 | B1 | Doan et al. | 12/18/2001 | |
| | | 6,350,180 | B2 | Southwick | 02/26/2002 | |
| | | 6,350,691 | B1 | Lankford | 02/26/2002 | |
| | | 6,352,466 | B1 | Moore | 03/05/2002 | |
| | | 6,352,470 | B2 | Elledge | 03/05/2002 | |
| | | 6,354,917 | B1 | Ball | 03/12/2002 | • |
| | | 6,354,923 | B1 | Lankford | 03/12/2002 | |
| | | 6,354,930 | B1 | Moore | 03/12/2002 | |
| | | 6,358,122 | B1 | Sabde et al. | 03/19/2002 | |
| | | 6,358,127 | B1 | Carlson et al. | 03/19/2002 | |
| | | 6,358,129 | B2 | Dow | 03/19/2002 | |
| | | 6,361,411 | B1 | Chopra et al. | 03/26/2002 | |

| EXAMINER | | DATE CONSIDERED |
|------------|--|---|
| | | |
| | | |
| *EXAMINER: | Initial if reference considered, whether or not criteria is in confe | ormance with MPEP 609. Draw line through citation if not in conformance and |
| | not considered. Include copy of this form with next communic | ation to application(s). |

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Form PTO-1449 (Modified) (Use several sheets if necessary)

of

| COMPLETE IF KNOWN | | | | |
|----------------------|-------------------|--|--|--|
| Application Number | | | | |
| Confirmation Number | | | | |
| Filing Date | April 20, 2004 | | | |
| First Named Inventor | Michael J. Joslyn | | | |
| Group Art Unit | | | | |
| Examiner Name | , | | | |
| Attorney Docket No. | 108298539US2 | | | |

| | | | U | .S. PATENT DOCUMENTS | | |
|-----------------------|-------------|---|------------------------|--|--|---|
| Examiner Initials* | Cite No. | • | ind Code (if known) | Name of Patentee or Inventor of Cited Document | Date of Publication or Filing Date of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | 6,361,413 | B1 | Skrovan | 03/26/2002 | |
| | | 6,361,417 | B2 | Walker et al. | 03/26/2002 | |
| | | 6,364,757 | B2 | Moore | 04/02/2002 | |
| | | 6,368,190 | B1 | Easter et al | 04/09/2002 | |
| | · | 6,368,193 | B1 | Carlson et al. | 04/09/2002 | |
| | | 6,368,194 | B1 | Sharples et al. | 04/09/2002 | |
| | | 6,368,197 | B2 | Elledge | 04/09/2002 | |
| | | 6,375,548 | B1 | Andreas | 04/23/2002 | |
| | | 6,376,381 | B1 | Sabde | 04/23/2002 | |
| | | 6,398,627 | B1 | Chiou et al. | 06/04/2002 | 11-10-100 v - 100 |
| | | 5,997,392 | | Chamberlin et al. | 12/07/1999 | |
| | | 6,053,801 | | Pinson et al. | 04/25/2000 | |
| | | 6,139,406 | | Kennedy et al. | 10/31/2000 | |
| | | 6,280,299 | B1 | Kennedy et al. | 08/28/2001 | |
| | | 6,284,092 | B1 | Manfredi | 09/04/2001 | |
| | | 2002/0022440 | | Kunugi | 02/21/2002 | |
| | | OTHER PRI | OR AR | T-NON PATENT LITERATURE | DOCUMENTS | |
| Examiner Initials* | Cite No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published. KONDO, S. et al., "Abrasive-Free Polishing for Copper Damascene Interconnection," Journal of The Electrochemical Society, Vol. 147, No. 10, pp. 3907-3913, 2000, The Electrochemical Society, Inc. | | | | |
| | | | | | | |

| EXAMINER | | DATE CONSIDERED |
|------------|--|--|
| | | |
| *EXAMINER: | Initial if reference considered, whether or not criteria is in confenot considered. Include copy of this form with next communic | ormance with MPEP 609. Draw line through citation if not in conformance and ation to application(s). |